

**Arizona Pathways to Prosperity
Quarterly Report Prepared for the Governor's Office
The Center for the Future of Arizona
January 2018 – May 2018**

Background:

Arizona is a member state of the Pathways to Prosperity Network, a national initiative in partnership with Jobs for the Future (JFF) and the Harvard Graduate School of Education. Arizona officially joined in June 2014.

The Arizona Pathways to Prosperity (AZPTP) initiative will demonstrate in key Arizona regional labor markets that many more young people can complete high school, attain a postsecondary credential with currency in the labor market, and get launched on a career in a high-demand, high-wage occupation that can also provide the basis to pursue further education and career advancement.

The Center for the Future of Arizona (CFA) is leading and advancing this work in keeping with our Center's commitment to catalyze and develop innovative student-centric educational and career pathways for all students.

The Governor's Office of Workforce Development awarded CFA in October 2014 a renewable grant to support the Center's work and Arizona's national network membership fee. In January of 2018 the Governor's Office, Arizona Community Foundation, Ellis Foundation, JPMorgan Chase Foundation, and Rodel Foundation announced a \$1.24M public-private investment to continue the Arizona Pathways to Prosperity work.

Tucson and Phoenix were identified as the initial major labor markets to begin building 9-14+ early college career pathways in partnership with K-12, business, and higher education. The work will extend into other regions in the state in future years. JFF provides technical assistance to CFA in support of the Pathways to Prosperity work in Arizona.

The Center for the Future of Arizona Pathways to Prosperity team includes:

- Dr. Amanda Burke, Senior Director for Education and Workforce
- Dr. Aaron Ball, Director of College and Career Pathways (Southern Arizona)
- Cindy Erwin, Director of College and Career Pathways (Phoenix Metropolitan area)
- Cathleen Barton, Consultant (industry expertise)

Major Accomplishments during the January - May 2018 Grant Period

- **Successfully announced a \$1.24M public private investment to expand APTP in Phoenix and Tucson** from the Governor's Office, Arizona Community Foundation, Rodel Foundation, JPMorgan Chase Foundation, and the Ellis Foundation
- **Established critical APTP partnership with Raytheon Missile Systems** involving pathways development with Pima Community College and CFA's direct engagement in a cutting edge machining apprenticeship program likely to be a model nationally.

- **Designed and launched a Possible Futures Possible Selves early career exploration pilot with 7 districts/charters (10+ schools)** leveraging Jobs for the Future staff and curriculum. Engaged systems partners at out the outset, including ADE, Pima Community College and Maricopa Community Colleges. Program provides students career exploration in STEM fields, and opportunity to build personal agency and a connection between their educational experiences and the world of work.
- **Expanded partnerships with Maricopa Community College District, Pima Community College, and Central Arizona College.** Successfully engaged in the MCCD Transformation Work, establishing key relationships, serving on committees, and engaging in guided pathways and industry partnership efforts. Now actively engaged in the Advanced Technologies Corridor work (led by OEO, MCCD, PCC, and ACA).
- **Advanced pathways implementation with 28 pathways schools (11 LEAs)** (via programs of study, career exploration, work-based learning, and teacher professional development). Established new partners: Phoenix Union High School District, AAEC, and Tanque Verde.
- **Brought significant visibility nationally to the industry-driven pathways work underway in Arizona during the spring Pathways to Prosperity National Network Institute held May 1-2** in Phoenix. Arizona was selected as the host site in recognition of the good work underway. Arizona was highlighted throughout the two-day Institute including in the opening session, breakout sessions that put a spotlight on the effective pathways sector strategies in Arizona, and plenary key notes.

Progress Update for the January - May 2018 Grant Period

CFA made significant progress toward meeting the intended outcomes for the Arizona Pathways to Prosperity grant project between January to May 2018. This progress is captured below.

- January- In partnership with the Governor's Office, Arizona Community Foundation, Rodel Foundation, JP Morgan Chase Foundation, and the Ellis Foundation, CFA hosted an announcement event to launch the new public-private partnership in support of Arizona Pathways to Prosperity. Over 150 business, education, philanthropy, government, and community leaders attended the event held at Honeywell. The event was a key opportunity to share the work completed thus far and engage a broader audience in the AZPTP work.
- January- Cathleen Barton, CFA consultant, facilitated the development and delivery of a pilot professional development session on cybersecurity careers and the business of cybersecurity for over 25 counselors, administrators and CTE instructors from the Phoenix Union High School District, in partnership with Dignity Health. Presentations and discussions, led by the Chief Information Security Officer and HR Director were well received, and plans are being developed to utilize with CFA Pathways partner districts in 2018/19 school year.
- February- On February 1st, CFA convened 36 individuals representing 9 K12 and Post-Secondary partners to celebrate Arizona Pathways to Prosperity school successes, spotlight school innovations and seek input on technical assistance needs for the year ahead. Dr. Charlotte Cahill and Tobie Baker-Wright, representing our national partner Jobs for the Future,

provided an overview of the work-based learning continuum and the Possible Futures middle school career literacy and guidance curriculum.

- February- Dr. Amanda Burke, Cindy Erwin, and Dr. Aaron Ball met with Cathie Raymond, Deputy Associate Superintendent for Career and Technical Education (CTE), at the Arizona Department of Education to discuss a deeper partnership between AZPTP and ADE. One outcome of this meeting is that, representing CFA, Cindy Erwin will participate in the development of the Arizona CTE strategic plan being developed by ADE CTE with the support of various stakeholders. Additionally, ADE will participate in the middle school early career literacy and guidance curriculum pilot project and will have staff trained in the curriculum. Cathie Raymond requested that the CFA team present to the ADE CTE staff later the same month to highlight the AZPTP work and strengthen the connection with ADE. This close partnership with ADE provides the opportunity to move AZPTP best practices to scale across the state.
- February- Cindy Erwin facilitated teacher and student training on five critical skills in energy with Peoria Unified School District and Arizona Public Service (APS). Engineers from APS visited classrooms, and teachers and students took field trips to an electrical plant. The students and teachers were able to experience first-hand the critical skills APS desires in new hires as well as experience the environment in an electrical plant. Teachers specializing in welding, construction, and engineering and their students participated in this project to better understand how the skills they are teaching/learning apply to the energy sector and learn what occupations are in demand. The project also highlighted a nontraditional route of a 4-year engineering degree to plant manager pathway that provides significant opportunity for career advancement. Based on the project results, CFA will evaluate the opportunity to expand the program to other school partners.
- February- Aaron Ball supported the Tucson Hispanic Chamber of Commerce Healthcare Workforce Forum held on February 15th. Dr. Ball helped advise the agenda to engage healthcare employers in a discussion regarding their workforce needs. One priority identified by the group of employers is to clearly identify opportunities to gain additional skills for entry level employees. These skills are needed to advance employees in the healthcare career ladder. Dr. Ball is now working with Pima College as they develop a Universal Healthcare Worker certificate that teaches required entry level skills while providing foundational certifications allowing workers to transition into multiple allied health and nursing careers. This innovative certificate will result in faster time to talent and more options for students. CFA is continuing to work with Pima to validate the certificate with additional industry partners and share the pathway with Maricopa Community College District.
- March- CFA facilitated a keynote speaking engagement for Dr. Nancy Hoffman, Senior Advisor at Jobs for the Future and co-founder of the National Pathways to Prosperity Network, at the Maricopa Community College District (MCCD) CTE Staff Conference. As a part of her keynote, Nancy shared the 9-14+ early college career pathway design and emphasized the importance of collaborating with AZPTP. This was a key opportunity to share the AZPTP work with a broader audience and expand the partnership with MCCD.

- March- Cathleen Barton began participation in weekly MCCD Transformation team meetings focusing on the Cybersecurity “institute” design. Progress to date includes outline of vision and mission, initial guiding principles and review of existing study programs from all colleges, which supports work of mapping and guided pathways teams. The MCCD Transformation work is directly related to improving the outcomes and success of students engaged in the CFA Pathways work.
- March- Cindy Erwin and Aaron Ball met with Caroline VanIngen-Dunn of the Science Foundation Arizona (SFAz) to discuss strategic alignment opportunities. One opportunity identified is for AZPTP to provide support to the National Science Foundation (NSF) Community College Kickstarter program. This program provides technical support for community colleges to apply for NSF STEM grants. CFA will bring expertise and the AZPTP best practices to support the colleges as they complete a STEM asset analysis and develop potential projects for submission to NSF. This partnership provides an opportunity to expand the reach of AZPTP and align CFA and SFAz initiatives to better support Arizona Community Colleges in STEM initiatives focused on industry engagement.
- March- CFA staff coordinated a Career Day for 150 students at Phoenix College Prep Academy (PCPA). Students in grades 9-12 heard from AZPTP industry partners and community college staff representing the Advanced Manufacturing, Healthcare, and Cybersecurity sectors. Industry partners shared occupational opportunities in each sector. That information was complemented by community college representatives sharing educational program opportunities aligned to those sectors. Feedback from the students and PCPA staff was positive. CFA is using the lessons learned to develop similar experiences for other AZPTP K12 partners.
- March- Cindy Erwin and Aaron Ball established critical connections with representatives from Banner Health, Dignity Health, and Honor Health. CFA identified key talent needs through input from the three organizations, CFA identified key talent needs for each. These needs include entry level occupations for medical assistants, patient care technicians, and certified nursing assistants. Importantly, all three organizations confirmed not only the need to identify educational pathways that will help students gain core foundational skills necessary for entry level positions, but also the allowance for advancement in the healthcare career to higher pay positions. CFA shared preliminary information on the Pima College Universal Health Worker certificate that could meet these needs. The organizations agreed that this certificate could be a significant opportunity to strengthen the healthcare education pathways. CFA agreed to facilitate convening additional healthcare employers to provide broader feedback.
- April- Aaron Ball participated in a 3-day machinist apprenticeship planning meeting with Raytheon Missile Systems, the National Institute for Metal Working Skills, and Pima Community College. This apprenticeship program is a first of its kind in the country; with both industry-based recognition and credential-based programming. The team developing the apprenticeship program is building a framework that Raytheon will to use for multiple occupational areas within the company. Importantly, provisions in the program allow for high school students to earn credentials that will prepare them to immediately enter the apprenticeship program after

graduation. Pima College will be the primary training provider, which allows apprentices to earn college credit and degrees that support career advancement. The program is expected to launch later this summer. CFA will play a critical role in connecting K12 partners to the apprenticeship program as well support the ongoing apprenticeship program evaluation.

- April- Cindy Erwin and Aaron Ball officially joined the Office of Economic Opportunity (OEO) Advanced Technologies Corridor work with Central Arizona, Maricopa, and Pima Community Colleges. While CFA supported the OEO industry summits in the past, Ms. Erwin and Dr. Ball now participate in weekly conference calls with the community colleges to provide input and technical assistance. Additionally, AZPTP will be a significant part of the strategy to reach high schools with the corridor work. Current AZPTP K12 partners will be among the first high schools to implement the newly developed curriculum, with CFA providing technical assistance during this process.
- April- AZPTP co-sponsored, with Greater Phoenix Chamber of Commerce and the Arizona Technology Council, an event featuring Joe Fuller of the Harvard Graduate School of Business and Eric Seleznow of Jobs for the Future. The event brought close to 50 business executives and community leaders together to hear from Dr. Fuller and Mr. Seleznow, a leading expert on the future of work. Dr. Fuller also shared key insights and best practices on how the business community can engage in filling the talent pipeline and fuel the local economy. Mr. Seleznow shared his expertise on apprenticeships from his time at the U.S. Department of Labor. The event was an opportunity to highlight the AZPTP work in Arizona and resulted in new industry connections.
- May- Arizona hosted the National Pathways to Prosperity Network Spring Institute. The network of 14 states and regions meets twice per year to learn from each other and share best practices from across the network. Over 220 participants attended marking the largest convening of the network to date. The Spring Institute is held in a member state/region that Jobs for the Futures feels is a model for advancing the pathways work. Arizona was chosen as the host state in large part because of our strategy to engage industry through sector partnerships, which is now held as a best practice. The Institute also provided the opportunity for AZPTP partners to showcase their pathways work. Several of the plenaries included AZPTP industry, sector, and post-secondary partners. Over 30 AZPTP partners participated in the Institute and took away key learnings they can apply in their organizations in partnership with CFA.
- May- CFA and our partner Jobs for the Future launched a pilot project to bring an innovative 7-10th grade career literacy and guidance curriculum to Arizona. JFF developed the curriculum over the past 4 years during a broad-scale implementation in the Long Beach Unified School District. The curriculum is customizable and provides hands-on, real-world learning opportunities for students. The curriculum supports youth in building their knowledge and cultivating a sense of personal agency to direct their educational and career pathways. Through the curriculum, students learn STEM subjects by connecting to local career contexts. Students develop vital skills, such as collaboration, critical thinking, self-direction, and persistence. As part of the pilot, CFA will work with K12, industry, and post-secondary partners to update lessons to reflect Arizona opportunities. Currently, 7 districts and the Arizona Department of

Education (ADE) will take part in the pilot. The pilot is fully-funded by CFA for Arizona Pathways to Prosperity Partners, including all curriculum, kick-off workshop, 3-day Institute, monthly support webinars, 1-2 additional in-person workshops, and implementation support.

Next Steps – June– August 2018:

- Continue to support and advise Raytheon as the company designs an internship/apprenticeship program.
- Continue implementation of the 7-10th grade career literacy and guidance curriculum project with a 3-Day Institute, which will include teachers, administrators, ADE staff, post-secondary representatives, and industry partners.
- Work with high school and postsecondary partners to expand the implementation of the career pathways for each of the sectors. This includes career information, exposure, and advisement; foundational career readiness skills; course structure aligned to career pathways; and work-based learning opportunities.
- Convene a group of healthcare employers to obtain feedback on the Pima College Universal Health Worker certificate and the potential benefits to the healthcare talent pipeline.
- Continue to develop the Arizona Pathways to Prosperity Learning Collaborative by convening K-12 and community college partners around areas of mutual interest.
- Continue conducting regional information meetings led by CFA. The purpose is to broadly communicate the initiative and identify additional prospective partners in K-12 and businesses that would like to formally engage in supporting the 9-14+ early college career pathways.
- Work with Maricopa Community College District and Pima Community College to develop a forum to take place fall 2018 for K12 leaders on guided pathways work underway at the colleges and implications for the K12 system.
- Explore high school apprenticeship program as a potential pilot for Arizona with a Swiss-based employer.
- Highlight Arizona success and best practices with AZPTP and partnerships with industry lead sectors in panel presentations at Western Pathways Conference.